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ANNUAL REPORT

OF THE

PUBLIC ANALYST

APPOINTED FOR THE

PARISH OF KENSINGTON,

For the Year ended 31st March, 1893.

BY

CHARLES E. CASSAL, F.I.C.,

VICE-PRESIDENT OF THE SOCIETY OF PUBLIC ANALYSTS.

PUBLIC ANALYST.

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ANNUAL REPORT

OF

THE PUBLIC ANALYST,

APPOINTED FOR THE

PARISH OF KENSINGTON.

For the Year ended 31st March, 1893.

DEPARTMENT OF PUBLIC ANALYST,

TOWN HALL, KENSINGTON, W.,

June, 1893.

To the Vestry of the Parish of St. Mary Abbotts, Kensington.

GENTLEMEN,

1. During the year ended on March 31st, 1893, four hundred and eighty-nine samples of Food and Drugs were submitted to me for analysis by the Inspectors appointed under the Acts. The number of samples analysed during each of the previous seven years is shown in Table IV., page

2. The samples consisted of 183 of milk, 77 of Butter, 40 of Coffee, 30 of Sugar, 24 of Bread, 19 of Tea, 18 of Black Pepper, 16 of Sulphur, 12 each of Gin, Rum, and "Rizine," 9 of Brandy, 8 each of Condensed Milk, Mustard, and Whisky, 6 each of Claret and Sausages, and 1 of White Pepper.

3. Taking the population of Kensington (in 1891) as 166,321, the number of samples *of all kinds* taken in the year is equivalent to one for every 340 persons. The nature of the samples submitted, and the general procedure in taking samples, is not in any way within the control of the Public Analyst.

4. Table I. shows the names and numbers of the samples taken in each quarter, with the totals for the year.

The extent to which the Acts have been applied in regard to the various articles mentioned is shown by this Table. In accordance with your Vestry's existing orders, the number of samples of milk taken for analysis continues to be very large as compared with other substances.

TABLE I.

	Quarter.				Total.
	1st.	2nd.	3rd.	4th.	
Milk	51	24	36	72	183
Butter	23	—	34	20	77
Coffee	4	16	—	20	40
Sugar	—	12	18	—	30
Bread	—	24	—	—	24
Tea	—	—	19	—	19
Black Pepper ...	—	—	18	—	18
Sulphur	—	16	—	—	16
Rizine	—	12	—	—	12
Gin	12	—	—	—	12
Rum	12	—	—	—	12
Brandy	9	—	—	—	9
Whisky	8	—	—	—	8
Condensed Milk ...	—	—	—	8	8
Mustard	8	—	—	—	8
Claret	—	—	—	6	6
Sausages	—	—	6	—	6
White Pepper ...	—	—	1	—	1
Total ...	127	104	132	126	489

5. The various articles examined may be conveniently classified, and the totals of each class of Food, &c., dealt with, shown, as in Table II.

TABLE II.

Class.	Article.	Total.
Milk Foods	Milk, 183; Butter, 77; Condensed Milk, 8	268
Coffee and Tea	Coffee, 40; Tea, 19	59
Spirits	Gin, 12; Rum, 12; Brandy, 9; Whisky, 8	41
Cereal and Starchy Foods	Bread, 24; Rizine, 12	36
Condiments	Black Pepper, 18; Mustard, 8; White Pepper, 1	27
Drugs	Sulphur, 16	16
Wine	Claret, 6	6
Various	Sugar, 30; Sausages, 6	36
	Total	489

6. Table III. shows the number of Genuine, Adulterated and Inferior samples taken during each quarter, with the totals for the year, and the number and names of those of each kind.

TABLE III.

Quarter	Genuine Composition.					Adulterated.					Inferior.					Total Samples.
	1st.	2nd.	3rd.	4th.	Total Genuine Composition.	1st.	2nd.	3rd.	4th.	Total Adulterated.	1st.	2nd.	3rd.	4th.	Total Inferior.	
Milk	30	21	26	58	135	18	3	5	5	31	3	...	5	9	17	183
Butter	11	...	19	9	39	12	...	15	11	38	...	...	...	...		77
Condensed Milk ...	...	...	...	3	3	..	..	...	5	5	...	...	...	...	...	8
Coffee	4	15	...	19	38	...	1	...	1	2	...	...	...	...	...	40
Tea	...	...	19	...	19	...	...	...	...	...	...	...	.	...	...	19
Brandy	8	...	...	...	8	1	...	...	...	1	...	...	...	...	...	9
Gin	12	...	...	...	12	...	...	...	...	...	...	...	...	...	...	12
Rum	9	...	...	...	9	2	...	...	...	2	1	...	...	...	1	12
Whisky	7	...	...	...	7	1	...	...	...	1	...	...	...	...	...	8
Bread	...	24	...	...	24	...	...	...	...	...	...	...	...	...	...	24
Rizine	...	12	...	...	12	...	...	...	...	...	...	...	...	...	...	12
Black Pepper ...	...	...	12	...	12	...	...	2	...	2	...	...	4	...	4	18
White Pepper ...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1
Mustard	8	...	...	...	8	...	...	...	...	...	...	...	...	...	...	8
Sulphur	...	16	...	...	16	...	...	...	...	...	...	...	...	...	...	16
Sugar	...	12	18	...	30	...	...	...	...	...	...	...	...	...	...	30
Sausages	...	...	6	...	6	...	...	...	...	...	...	..	...	...	...	6
Wine (Claret) ...	...	...	...	6	6	...	...	...	...	...	...	...	...	...	...	6
Totals	89	100	101	95	385	34	4	22	22	82	4	0	9	9	22	489

7. The percentages of Genuine, Adulterated and Inferior samples, given by the figures in Table III., are compared with those obtained in the previous seven years, ended 25th March, 1886, 25th March, 1887, 25th March, 1888, 31st March, 1889, 31st March, 1890, 31st March, 1891, and 31st March, 1892, in the following Table (IV.):—

TABLE IV.—PERCENTAGES.

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.
Genuine ...	48·7	53·0	72·2	73·44	77·78	71·20	73·69	78·73
Adulterated ...	34·5	28·0	15·3	13·89	14·88	22·00	16·67	16·77
Inferior ...	11·1	17·0	11·1	10·06	6·08	5·60	9.64	4·50
Abnormal ...	5·7	2·0	1·4	2·61	1·26	1·20	—	—
Number of Samples Submitted ...	524	499	503	497	477	500	498	489

MILK.

8. The percentages obtained from the data in Table III., together with those obtained in 1885-86, 1886-87, 1887-88, 1888-89, 1889-90, 1890-91, 1891-92, are stated in Table V.

9. The comparatively large number of samples of milk taken makes it important to compare these percentages with those of previous years.

TABLE V.—PERCENTAGES (MILK.)

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.
Genuine ...	29·0	37·86	55·46	58·33	63·55	65·45	60·39	73·77
Adulterated ...	46·3	39·92	27·07	20·84	21·50	26·70	25·25	16·94
Inferior ...	11·0	18·10	14·41	14·81	12·15	4·71	14·36	9·29
Abnormal ...	13·7	4·12	3·06	6·02	2·80	3·14	—	—
Number of Samples Submitted ...	218	243	229	216	214	191	202	183

10. It will be seen from this Table that of milk of bad quality, including Adulterated and Inferior samples, there were

26·23 per cent. in 1892-93, as against
39·61 „ 1891-92,
31·40 „ 1890-91,
33·65 „ 1889-90,
35·65 „ 1888-89,
41·48 „ 1887-88,
58·02 „ 1886-87,
57·3 „ 1885-86,

11. *Adulterated Milk.*—The particulars relating to the thirty-one samples returned as adulterated in Table III. are given in the following Table (VI.). In order to facilitate reference, the quarter of the year in which each sample was taken is also given in this Table.

TABLE VI.

Minimum Percentage of Extraneous Water.	Minimum Percentage of Fat Abstracted.	Boric Acid Preservative.	Number of Samples.	Quarter Taken.
16	...	...	1	3rd
15	...	Present	1	2nd
12	...	Present	1	4th
8	...	...	1	3rd
5	...	...	1	1st
4	...	...	1	1st
3	...	...	2	2nd & 4th
...	40	...	1	2nd
...	25	Present	1	3rd
...	20	...	1	4th
...	12	Present	1	3rd
...	12	...	2	1st & 3rd
...	10	...	2	1st
...	5	...	2	1st & 4th
...	...	Present	13	1st (12), & 4th (1)
	Total	...	31	

12. *Adulterated Milk* (*Analytical Results*).—The results in Table VI. were calculated on the lowest admissible limits which were consistent with the Analytical data obtained.

13. *Inferior Milk.*—The seventeen samples returned as "Inferior" were of bad quality; they were all exceedingly poor, but actual adulteration could not be certified in any case. In these cases of "inferiority" the milks had been purposely so prepared as to be deficient in some proportion of their fat, but the amounts left did not admit of the samples being reported as adulterated, in consequence of the adoption of low standards of quality. It is important to ascertain, for administrative purposes, where and under what circumstances such milks are sold. A permanent record of these sales should be of great value in the working of the Acts.

14. *"Genuine" Milk.*—Of the 135 samples of milk reported as of genuine composition, 39 were of good quality, 69 could be regarded as of fair quality, 22 were poor milks, 3 were sold as "separated" milks and had been correctly described as such, and 2 were sold as "skim" milks and had been correctly so described.

15. One of the samples certified to contain at least 3 per cent of extraneous water was sold as "skim" milk. The composition of "skim" milk is different from that of milk adulterated with water. The erroneous impression still appears to exist that watered milk can be sold with impunity if it be called either "skim," or "separated" milk.

Two samples sold as "skim" milk, contained Boric Acid, but were otherwise of the composition of "skim" milk. Of two samples of milk, which, it appears, were taken at Addison Road Railway Station, one was the sample reported as containing 5 per cent. of water, and the other was a sample reported as inferior, and in regard to which actual adulteration could not be certified.

16. *Addition of Boric Acid preparations to Milk.*—This matter has been fully dealt with in my previous reports to your Vestry.

BUTTER.

17. Of the thirty-eight samples reported as "Adulterated," 5 contained foreign fat, and 33 contained Boric Acid compounds. The following are the particulars relating to the five samples adulterated with foreign fat :—

85 per cent. foreign fat
80 „ „
65 „ „
45 „ „
40 „ „

18. The percentage of Adulteration is increased by the number of Butters found to contain Boric Acid. In previous Reports, the grounds for certifying samples of Food containing Boric Acid, as "Adulterated," have been fully stated. It is considered by many persons that the addition of Boric Acid compounds to *Butter* ought not to be regarded as an Adulteration. This circumstance may, no doubt, lead to the innocent employment of these substances through the belief that there is no objection to the practice. A Public Analyst has at present no option in the matter. It is his duty to state the fact, and in drawing up his Statutory Report, he can at present only place such articles in the "Adulterated" class.

CONDENSED MILK.

19. The five samples reported as Adulterated were respectively deficient in fat to the extents mentioned below :—

(*a*) 90 per cent.
(*b*) 90 per cent.
(*c*) 90 per cent.
(*d*) 80 per cent.
(*e*) 50 per cent.

20. With one exception these samples were sold in tins labelled with the words "Condensed Milk" in large letters, as a principal title, while upon another part of the label the word "Skim" or "Skimmed" was found to have been introduced. In the exception alluded to, the word "Skimmed" formed part of the title of the article. It is a matter of common knowledge that these substances are produced from Milks from which the fat has been removed by means of machinery, namely, by the so-called "Separators," and in the cases marked *a*, *b*, *c*, and *d*, the articles should have been sold under a distinctive title such as "Condensed Separated Milk" so that the public might know that they were practically devoid of fat, this constituent having, in fact, been, by some means,

"separated." The use of the word "Skimmed" suggests to the general public that a valuable proportion of fat is present in the article so described. Milk from which fat has been removed is not of the nature, substance and quality of "Milk."

21. The remaining three samples, which were reported as of genuine composition, contained a proper proportion of fat, and of the other constituents of Condensed Milk, and were of good quality.

COFFEE.

22. The two samples reported as adulterated respectively contained 90 per cent. of chicory and 5 per cent. of chicory. The remaining samples could in no case be certified as adulterated, and were reported as of Genuine composition.

23 In considering these cases it must be borne in mind that coffee and chicory are entirely different substances, merely resembling one another to some extent in colour and appearance. Coffee is a roasted and ground berry, containing certain aromatic and other compounds which give the substance its character and value. Chicory is a roasted and ground root, which does not contain the substances peculiar to coffee, and which when present in large amount yields an extract which has a very unpleasant effect upon many persons.

TEA.

24. The samples of Tea were all reported as having the composition of Genuine teas.

SPIRITS (BRANDY, GIN, RUM, WHISKY.)

25. The four samples reported as Adulterated were certified as being below the legal strength. The following are the particulars of these cases :—

(*a*) Brandy	...	31·50 Under proof.
(*b*) Rum	...	27·78 Under proof.
(*c*) Rum	...	27·69 Under proof.
(*d*) Whisky	...	26·28 Under proof.

One sample of Rum was of inferior quality, but actual adulteration could not be certified.

26. The limit of strength fixed by the Sale of Food and Drugs Amendment Act of 1879 is 25 under proof for Brandy, Rum, and Whisky, and for Gin it is 35 under proof. Inasmuch as a limit of strength is fixed by Act of Parliament, it is plain that any spirit deficient in strength, even if it be only slightly below the limit, must be reported as adulterated. The sale of any spirit below the limit of strength constitutes an offence under the Act.

27. The remaining samples of Spirits were reported as containing no substances which could be certified as adulterants, as being of the strength required by law, or above that strength, and therefore as of Genuine composition.

BREAD.

28. The samples of Bread were all reported as being of Genuine composition.

RIZINE.

29. The samples of "Rizine" were all reported as containing no substances which could be certified as adulterants. They were all of the same composition, and consisted of a preparation of cooked rice, obtained by a special form of manufacture. The substance is a cooked starchy food sold under a particular trade name.

BLACK PEPPER.

30. The two samples certified as adulterated contained respectively, 8·74 per cent. of total mineral matters, and 3·52 per cent. of silica and sand; and 7·71 per cent. of total mineral matters, and 2·34 per cent. of silica and sand. Samples of genuine Black Pepper should not yield more than 5 to 5·5 per

cent. of total mineral matter. Any sample yielding more than 7 per cent. is adulterated within the meaning of the Acts. The four samples of Black Pepper reported as Inferior each contained rather high proportions of total mineral matter, but they could not be certified as adulterated.

WHITE PEPPER.

31. This sample was reported as being of Genuine composition.

MUSTARD.

32. The Eight samples of Mustard were all reported as being of Genuine composition.

SULPHUR.

33. It appeared that the samples of sulphur were all purchased merely as "Sulphur" and not as any particular form of that substance, such as "Precipitated Sulphur." They were all found to be free from adulteration.

SUGAR.

34. Of the samples of sugar 12 consisted of Powdered White "Castor" Sugar, and 18 consisted of White Loaf Sugar. They were all reported as being of Genuine composition.

SAUSAGES.

35. These samples were all reported as free from substances which could be certified as adulterants.

WINE (CLARET.)

36. These samples were all reported as having the composition of genuine Wine of the Claret class.

37. It may be noted that a high precentage of genuine samples may be partly due to the nature of the samples submitted. Although some of the articles taken are not now frequently adulterated, it is necessary that they should be examined from time to time.

ACTION TAKEN.

38. Table VII. shows the action taken in each case of adulteration, and the result (if any) of such action. These particulars have been compiled from books kept in the Clerk's Department for the purpose of recording the results of proceedings ordered ; for convenience of reference they have been inserted in the quarterly reports to your Vestry. The Local Government Board have requested Public Authorities to inform them of the results of any proceedings that may have been taken under the Acts, when forwarding the quarterly reports of their Public Analysts to the Board, and it is undoubtedly of great importance to obtain statistics showing the manner in which the Acts against adulteration are being administered.

39. *Cautions.*—Where, for various reasons, it was not deemed advisable to institute proceedings, cautionary letters were addressed by your Vestry to the Vendors of the adulterated articles, a course of action which cannot have failed to produce a salutary effect. This action is, however, as I understand, not to be taken to mean that your Vestry will decline to prosecute in all future cases which are similar as regards nature and extent of adulteration.

TABLE VII.

ACTION TAKEN.

Name of Sample.	Adulteration.	Action Taken.	Result.
Milk	16 per cent. water	Vendor summoned	Fined £4 and 12/6 costs.
Milk	15 per cent. water, and Boric Acid present.	Vendor summoned	Fined £4 and 12/6 costs.
Milk	12 per cent. water, and Boric Acid present	Vendor summoned	Fined £2 and 12/6 costs.
Milk	8 per cent. water	Vendor summoned	Fined £2 and 12/6 costs.
Milk	5 per cent. water	Vendor summoned	Fined £1 and £1 10s. costs.
Milk	4 per cent. water	Vendor cautioned	
Milk	3 per cent. water	Vendor cautioned	
Milk	3 per cent. water	Vendor cautioned	
Milk	40 per cent. fat abstracted	Vendor summoned	Fined £8 and 12/6 costs, or one month's imprisonment.
Milk	25 per cent. fat abstracted, and Boric Acid present	Vendor summoned	Fined £5 and 12/6 costs.
Milk	20 per cent. fat abstracted	Vendor summoned	Summons dismissed.*
Milk	12 per cent. fat abstracted, and Boric Acid present	Vendor summoned	Fined £2 and 12/6 costs.
Milk	12 per cent. fat abstracted	Vendor summoned	Fined £1 and 12/6 costs.
Milk	12 per cent. fat abstracted	Vendor cautioned	
Milk	10 per cent. fat abstracted	Vendor cautioned	
Milk	10 per cent. fat abstracted	Vendor cautioned	
Milk	5 per cent. fat abstracted	Vendor cautioned	
Milk	5 per cent. fat abstracted	Vendor cautioned	

* Legal informality.

TABLE VII.—*continued.*

Name of Sample.	Adulteration.	Action Taken.	Result.
13 Milks	Boric Acid present.		
Butter	85 per cent. foreign fat	Vendor summoned	Fined £5 and 12/6 costs
Butter	80 per cent. foreign fat	Vendor summoned	Fined £1 and 14/6 costs
Butter	65 per cent. foreign fat	Vendor summoned	Fined £1 and 14/6 costs
Butter	45 per cent. foreign fat	Vendor summoned	Fined £3 and 12/6 costs
Butter	10 per cent. foreign fat, and Boric Acid present	Vendor summoned	Fined 2/- and 12/6 costs
33 Butters	Boric Acid preservatives.		
Condensed Milk	90 per cent. fat abstracted	Vendor summoned	Fined £5 and 12/6 costs
Condensed Milk	90 per cent. fat abstracted	Vendor summoned	Fined £5 and 12/6 costs
Condensed Milk	90 per cent. fat abstracted	Vendor summoned	Fined £1 and £2 13 6 costs
Condensed Milk	80 per cent. fat abstracted	Vendor summoned	No service.
Condensed Milk	50 per cent. fat abstracted	Vendor summoned	Summons withdrawn*
Coffee	90 per cent. Chicory	Vendor summoned	Fined 12/6 costs
Coffee	5 per cent. Chicory	Vendor cautioned	
Black Pepper	8·74 per cent. mineral matter, &c.	Vendor cautioned	
Black Pepper	7·71 per cent. mineral matter, &c.	Vendor cautioned	
Brandy	31·5 under proof	Vendor summoned	Fined £1 and 12/6 costs
Rum	27·78 under proof	Vendor cautioned	
Rum	27·69 under proof	Vendor cautioned	
Whisky	26·28 under proof	Vendor cautioned	

* On account of conditions of sale with respect to the label.

40. From the foregoing Table, it appears that fines amounting to £51 2s. 0d. were ordered to be paid to the Vestry during the year, and that in addition, costs amounting to £15 0s. 0d., were also ordered to be paid to the Vestry, making a total sum receivable of £66 2s. 0d.

THE AMENDMENT OF THE LAW RELATING TO ADULTERATION.

41. In view of the urgent necessity for the amendment of the Law relating to Adulteration, the Society of Public Analysts convened a special meeting on the 15th February last to consider a series of resolutions drafted by the Council of the Society. The meeting was largely attended both by members of the Society and by other persons variously interested in the working of the Sale of Food and Drugs Acts. In the result the undermentioned eight resolutions were each unanimously approved of by the meeting.

1. That amendment of the Laws relating to Adulteration is urgently required.

2. That the present Acts often operate unfairly on the retail traders, and that provision is necessary to ensure, in many cases of Adulteration, the prosecution of the real offenders.

3. That in view of the fact that, as is shown in the Local Government Board Reports, the Food Acts are practically dead letters in a large area of the United Kingdom, it is necessary that adequate provision be made for securing uniformity in their application and in their due enforcement.

4. That in order that the Local Government Board should have better control over the working of the Acts, a portion of the expenses of working them should be borne by the Imperial Revenue.

5. That in view of this, it is desirable that there should be a duly constituted Chemical Department of the Local Government Board, with whom the Public Analysts, as officers of the Local Government Board, should be placed in direct relation.

6. That the present system of reference in the case of disputed analyses is unsatisfactory, and ought to be entirely remodelled.

7. That compulsory combinations of the two offices of Medical Officer and Public Analyst are, in the public interest, undesirable.

8. That provision should be made to ensure better than heretofore the proper qualification of officers under the Acts.

42. It will be seen from these resolutions that a thoroughly comprehensive Amendment Act is required in order that the public may be adequately protected from adulteration.

THE REFERENCE OF DISPUTED CASES TO SOMERSET HOUSE.

43. *Action of the Society of Public Analysts.*—In the Report for the Quarter ended on the 31st March, 1892, attention was called to the unsatisfactory system of reference under the present Acts. Since then this matter has attracted a considerable amount of public notice, and in September, 1892, a letter was addressed to the Principal of the Inland Revenue Laboratory at Somerset House, by the Society of Public Analysts, pointing out that some of the certificates issued by him were liable to produce an erroneous impression on Magistrates and on the public, and requesting his consideration of certain suggestions made to him for the amendment of such certificates, more especially of those relating to milk and butter.

It was further pointed out, in effect, to the Principal of Somerset House Laboratory, that it is impossible to form a reliable opinion of the composition of a milk when fresh from an analysis of that milk when it is decomposed—a very well-known fact,—that Public Analysts calculated the amount of adulteration from the normal composition of a genuine article, while the statement of the Somerset House Department was commonly based only upon an abnormal minimum, and that it would only be fair, in cases where the Department was unable to affirm the existence of adulteration, to state that the Department was equally unable to affirm that the article was not adulterated ; and, further, that the analytical results were compatible with the amount of adulteration stated by the Public Analyst whenever those results were such as are well known to be obtained with certain adulterated samples.

The letter was signed by 119 members of the Society of Public Analysts, including nearly all the Public Analysts in the United Kingdom.

An unsatisfactory reply having been received from the Principal of the Somerset House Laboratory, the Council of the Society expressed their regret that he could not see his way to adopt the suggestions made to him, and that he adhered to a course of procedure opposed to the general opinion of Public Analysts.

A printed copy of the correspondence was laid before your Vestry, and was referred to the Special Purposes Committee. The Report of the Committee, which was adopted by the Vestry, was as follows :—

44. *Report of Special Purposes Committee and Resolution of Vestry.*—"The Committee have, in pursuance of the reference by the Vestry of the 1st March, considered the copy of correspondence between the Society of Public Analysts

and the Principal of the Inland Revenue Laboratory, Somerset House, relative to the wording of the certificates issued by that Department on disputed samples referred to him under the Sale of Food and Drugs Act ; and recommend that a communication be addressed to the Local Government Board inviting their serious consideration of the said correspondence, and intimating that the Vestry are impressed with the importance that the Authority, to whom reference shall be made under the Sale of Food and Drugs Act, shall be one that has the confidence of the Public Analysts of the Country and the public generally."

BILLS IN PARLIAMENT.

45. A "Bill to amend the Sale of Food and Drugs Act, 1875, and the Margarine Act, 1887," prepared and brought in by Dr. Cameron, Mr. Channing, Dr. Farquharson, Mr. Frye, and Mr. Kearley, is now before the House of Commons. This Bill is virtually a reproduction of one previously brought in by Dr. Cameron and others, which, if passed, would have seriously interfered with the application of the Sale of Food and Drugs Act, and in certain respects would have rendered it inoperative, since it provided that a special warranty as to the purity of any articles sold by one trader to another should not be required where the "Warranty Section" was relied on by the defendant, but that every invoice or bill should be held to constitute such a warranty. The mere production in Court of any invoice by an accused person would have exonerated the accused. If the Bill had provided for the prosecution of the the giver of the invoice, offences committed against the Sale of Food and Drugs Act might, perhaps, have been brought home in some cases to the really guilty persons ; but there was no such provision in the Bill, and offenders, both retail and wholesale vendors, would in most cases have escaped altogether. In very many cases, moreover, the original vendors reside abroad and could not be reached. This Bill contained other

provisions which, if passed into law, would unquestionably have been most injurious to the public. It was dropped, but it has recently re-appeared in the form of the Bill above referred to.

The main provision of this Bill is to make the *act of sale* by a wholesale trader to a retailer, a "warranty" that the article sold is of the "nature, substance, and quality," demanded by the purchaser. Such a provision, if passed into law, would entirely prevent the successful application of the Sale of Food and Drugs Acts. There are certain other objectionable provisions in the Bill, and, in fact, it contains no single clause which could be recommended for favourable consideration.

46. *Report of Special Purposes Committee.*—The Special Purposes Committee, having considered the Bill, made the following report to your Vestry :—

"That the Committee have had before them, the 'Sale of Food and Drugs Acts, (1875), &c., Amendment Bill,' which has been introduced into the House of Commons for the amendment of the Sale of Food and Drugs Act, (1875), and the Margarine Act, (1887), and whilst they are in favour of the Sale of Food and Drugs Acts being amended in certain particulars, and of the Wholesale Vendor being brought within the scope of the provisions of the Acts, they consider that the present Bill, as now framed, is not sufficiently comprehensive in its character, and would not effect its object so far as the Wholesale Vendor is concerned, and are of opinion that the amendment of the Acts should be given effect to only after the whole question shall have been fully considered by a Select Committee of the House of Commons.

"That the Committee, looking to the probability that existed of the second reading of the Bill being taken before

the meeting of the Vestry, deemed it expedient to direct the Vestry Clerk to at once communicate the resolution passed by them embodying the views above set forth to the Members of Parliament for the Borough of Kensington, the Members whose names appear on the back of the Bill, to the Local Government Board, and to the Vestries and District Boards of the Metropolis."

47. *Resolution of Vestry.*—Your Vestry adopted the report and approved of the action taken by the Committee.

Letters were received from several of the Authorities in the Metropolis, agreeing with the action taken by the Vestry.

Several public authorities have also expressed their disapproval of this Bill.

48. The Government accepted the Bill on the understanding that it should be referred to a Select Committee. That a thoroughly comprehensive Amendment Act is required in order that the public may be adequately protected from adulteration, must long have been obvious to all who have considered the subject; but it would be a serious blunder to take the Bill referred to in any way as the basis of a satisfactory and adequate Amendment Bill.

GENERAL REMARKS.

49. *Samples examined in England and Wales.*—During the year 1891—the last for which the returns have hitherto been received—the total number of samples of all kinds examined by the Public Analysts of England and Wales was 29,028, an increase of 1,563 upon 1890. The data in the following table have been obtained from the Local Government Board's reports for 1890 and 1891, and show the number of samples of each kind which were examined, and the number

reported as adulterated in those years, with a comparison of percentages. The table also contains the percentages of adulteration for the five years 1877-81, 1882-86, 1887-91.

TABLE VIII.

ARTICLES.	No. of Samples in 1890.		No. of Samples in 1891.		Percentage adulterated in				
	Examined.	Adulterated.	Examined.	Adulterated.	1890	1891	Quinquenniad.		
							1877-81	1882-86	1887-91
Milk	11,967	1,530	12,151	1,633	12·8	13·4	21·1	16·7	13·2
Bread	689	5	799	8	0·7	1·0	6·6	3·4	1·4
Flour	317	2	437	1	0·6	0·2	2·5	0·5	3·0
Butter	2,743	316	3,558	551	11·5	15·5	13·9	17·9	13·4
Coffee	1,733	266	1,684	287	15·3	17·0	18·6	17·8	14·8
Sugar	246	34	171	8	13·8	4·7	1·2	—	4·6
Mustard	787	56	689	60	7·1	8·7	17·4	14·5	9·2
Confectionery & Jam	342	—	403	11	0·0	2·7	2·8	2·7	3·2
Pepper	1,329	75	1,452	41	5·6	2·8	—	—	7·5
Tea	349	—	412	—	0·0	0·0	—	—	0·1
Lard	1,024	11	1,107	26	4·0	2.3	—	—	7·9
Wine	65	5	51	2	7·7	3·9	14·2	4·4	4·7
Beer	342	7	268	11	2·0	4·1	5.4	3·0	2·6
Spirits	2,706	489	3,139	600	18·1	19·1	34·9	22·3	18·5
Drugs	959	139	740	121	14·5	16·4	22·0	13·6	13·1
Other Articles ...	1,867	104	1,967	180	5·6	9·2	—	—	7·5
Totals	27,465	3,069	29,028	3,540	11·2	12·2	16·2	13·9	11·7

50. *Metropolis.*—The total number of samples of all kinds taken in the Metropolis in 1891 was 7295, an increase of 448 upon 1890. Of these 1,163 were adulterated, as against 1,058 in 1890, giving a percentage of 15·9 for 1891, against 15·5 for 1890.

51. "*Private Purchasers.*"—Under the provisions of the *Sale of Food and Drugs Act*, 1875, private purchasers have the privilege of submitting samples for analysis upon payment of a nominal sum. Of the 29,028 samples analysed in 1891, all but 177 were obtained by officers of Local Authorities, and,

as usual, a much larger proportion (34·5 per cent.) of the private than of the official samples was found to be adulterated.

I have the honour to be,

Gentlemen,

Your obedient Servant,

CHARLES E. CASSAL,

Public Analyst.